# MALE REPRODUCTIVE DEVELOPMENT

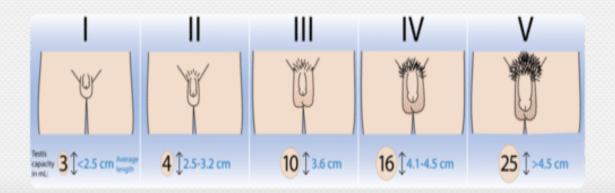
Mr. Michael A. Mendoza, MAEd, RGC, RPm, LPT, CHRA Instructor

## What is puberty?

 It is the period of life, generally between the ages of 10 to 15 years old, when the reproductive organs grow to their adult size and become functional under the influence of rising levels of gonadal hormones (testosterones in males and estrogen in females)

#### What causes puberty to begins in male?

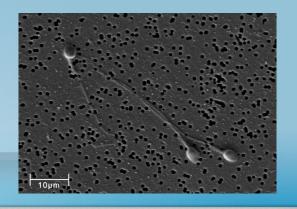
 The hypothalamus in the brain "tells" the pituitary gland to secrete hormones that target the testes. The main pituitary hormone involved is luteinizing hormone (LH). It stimulates the testes to secrete testosterone.



#### **Adolescent Growth Spurt**

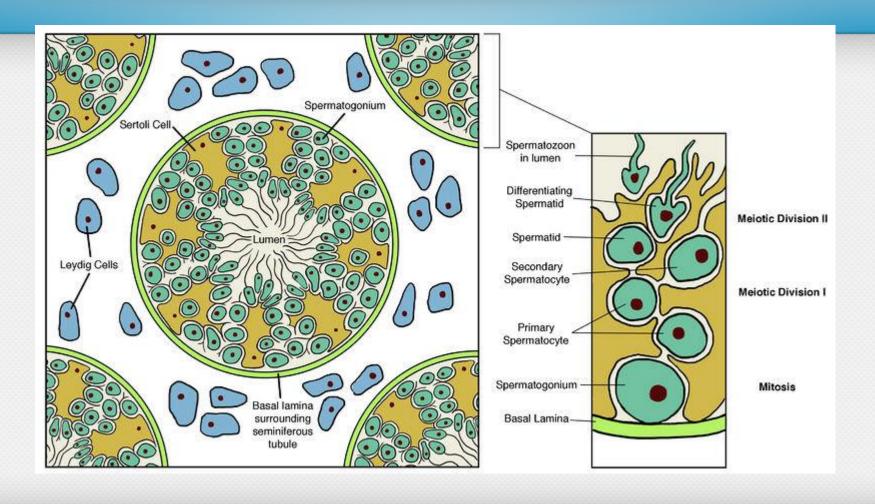
- Another obvious change that occurs during puberty is rapid growth. This is called the adolescent growth spurt.
- It is the fast and intense increase in the rate of growth in height and weight that occurs during the adolescent stage of the human life cycle.

#### **Spermatogenesis**



- The process of producing mature sperm is called spermatogenesis.
- Sperm are produced in the seminiferous tubules of the testes and become mature in the epididymis.
- The entire process takes about 9 to 10 weeks.

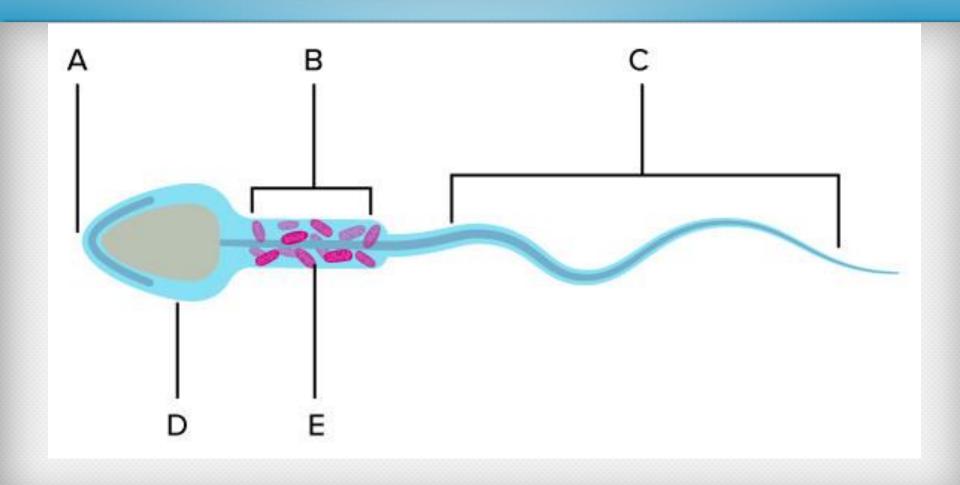
### **Spermatogenesis**



#### **Sperm Maturation**

- After spermatids form, they move into the epididymis to mature into sperm.
- The spermatids grow a tail and lose excess cytoplasm from the head.
- When a sperm is mature, the tail can rotate like a propeller, so the sperm can propel itself forward.

### Structure of the Sperm



#### **Ejaculation**

- Sperm are released from the body during ejaculation.
- Ejaculation occurs when muscle contractions propel sperm from the epididymis.
- The sperm are forced through the ducts and out of the body through the urethra. As sperm travel through the ducts, they mix with fluids from the glands to form semen.
- Hundreds of millions of sperm are released with each ejaculation.



#### References:

- Male Reproductive Development | CK-12 Foundation (ck12.org)
- Sperm | CK-12 Foundation (ck12.org)

# Thank you for listening! ©